

ABSTRACT OF THE DISCLOSURE

A method for fabricating an array substrate having a color filter on a thin film transistor structure for a liquid crystal display device is disclosed in the present invention. The method for fabricating the array substrate includes forming a gate line and a data line crossing each other and defining a pixel region, forming a thin film transistor at each intersection of the gate and data lines, wherein the thin film transistor includes a gate electrode, an active layer, a source electrode, and a drain electrode, forming a first insulating layer to cover the thin film transistor and the data line, forming a black matrix on the first insulating layer, except for a portion of the drain electrode, forming a second insulating layer on the first insulating layer to cover the black matrix, patterning the first and second insulating layers to expose a portion of the drain electrode, forming a first transparent electrode layer over a surface of the substrate to cover the patterned second insulating layer and the exposed portion of the drain electrode, patterning the first transparent electrode layer to form a pixel electrode in the pixel region, wherein the pixel electrode contacts the exposed portion of the drain

electrode, forming a color filter on the pixel electrode, forming a second transparent electrode over a surface of the substrate to cover the color filter and the pixel electrode, wherein the second transparent electrode is in an amorphous state, irradiating a light to a portion of the second transparent electrode layer corresponding to the pixel region so as to crystallize the irradiated portion of the second transparent electrode, and forming a second pixel electrode in the pixel region by removing the non-crystallized portion of the second transparent electrode layer, wherein the second pixel electrode contacts the first pixel electrode over the black matrix.